

Case 3348***Palamopus* E. Hitchcock, 1845 (Ichnotaxa, Reptilia?): proposed conservation**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the name of the reptilian(?) ichnogenus *Palamopus* E. Hitchcock, 1845. *Palamopus* is a junior objective synonym of *Sauroidichnites* E. Hitchcock, 1837, but *Palamopus* is in prevailing use and it is proposed that it be conserved by suppression of *Sauroidichnites*.

Keywords. Nomenclature; taxonomy; ichnotaxa; Reptilia?; *Ornithichnites*; *Sauroidichnites*; *Palamopus*; *Palamopus palmatus*; tetrapod footprints; Triassic, Jurassic.

1. The ichnogenetic name *Sauroidichnites* was introduced by Edward Hitchcock in an 1837 abstract (E. Hitchcock, 1837, p. 175) for several ichnospecies which he considered to resemble the feet of reptiles (saurians) and were thus distinct from the ichnospecies he had described in 1836 under the ichnogenus *Ornithichnites* (which resembled the feet of birds). Of five ichnospecies included within this ichnogenus, four are nomina nuda, including the first-listed ichnospecies (*S. barrattii*). However, one of the included ichnospecies had been previously described and illustrated as *Ornithichnites palmatus* (E. Hitchcock, 1836, p. 324, fig. 15); *Sauroidichnites palmatus* is thus valid by explicit bibliographic reference ('*Ornithichnites palmatus* of my first report' [E. Hitchcock, 1837 p. 175]). *Ornithichnites palmatus* is, therefore, the type ichnospecies of *Sauroidichnites*. Between 1841 and 1844, Hitchcock named and described an additional 11 ichnospecies of *Sauroidichnites* (including the four nomina nuda from 1837, which were described in 1841) (E. Hitchcock, 1841, 1843, 1844).

2. In an 1845 abstract, Hitchcock revised his classification scheme for ichnites, and abandoned his previous ichnogenetic names (*Ornithichnites*, *Sauroidichnites* and *Batrachoidichnites*). In their place he erected several new ichnogenera, placing all his previously-described ichnospecies of *Sauroidichnites* into seven new ichnogenera. The type ichnospecies of *Sauroidichnites*, *O. palmatus*, was referred to *Palamopus* (1845, p. 24), which was monospecific: thus *Sauroidichnites* and *Palamopus* are objective synonyms, and *Palamopus*, being the junior synonym, is invalid. It may be noted that Hitchcock (1845, p. 24) simultaneously replaced the ichnospecific name *palmatus* with the new ichnospecies *anomalus*, in the combination *Palamopus anomalus*; *anomalus* is an objective junior synonym of *palmatus* and thus available but invalid. All of the remaining ichnogenera into which ichnospecies of *Sauroidichnites* were

transferred in 1845 are valid, because one or more of their included ichnospecies are valid by explicit bibliographic reference to the pre-1845 ichnospecies names.

3. In 1848, Hitchcock again revised his nomenclature, providing new names for many of his 1845 ichnogenera, on the grounds that the 1845 names were published without accompanying descriptions. However, as stated in para. 2, the 1845 ichnogenus names are valid by explicit bibliographic reference to earlier descriptions of their included ichnospecies. Of relevance here, *Ornithichnites palmatus* was referred to the new ichnogenus *Macropterna*. E. Hitchcock also, in 1848 (p. 217), named a new monospecific ichnogenus, *Palamopus*, based on the new ichnospecies *P. dananus*; this homonymy was resolved by Hay in 1902, who erected the replacement name *Eupalamopus* for the junior homonym *Palamopus* E. Hitchcock, 1848. *Palamopus* E. Hitchcock, 1845 and *Macropterna* were subjectively synonymized by Hay (1902), and this synonymy has been followed by subsequent workers (e.g. Lull, 1904, 1915, 1953; Kuhn, 1963; Haubold, 1971, 1984). *Macropterna* has not been used as the valid name since C.H. Hitchcock's 1889 classification; *Palamopus* (which has priority over *Macropterna*) has had limited usage since 1899.

4. *Sauroidichnites* has not been considered valid since 1844 (when it was last used, by E. Hitchcock). However, only one of the two conditions for prevailing usage (and thus Reversal of Precedence; Article 23.9) is met. The senior synonym has not been used as a valid name since 1844 (Article 23.9.1.1) and qualifies as a nomen oblitum. However, Article 23.9.1.2 is not met, because to my knowledge only four authors, in four published works (Kuhn, 1963; Haubold, 1971, 1984; Olsen & Padian, 1986), have used the junior synonym in the last 50 years. The limited use of the name *Palamopus* is insufficient to allow its automatic conservation under the provisions of the Code. While clearly a largely-ignored ichnogenus, a recent study (Rainforth, 2005) has completely re-evaluated all of Hitchcock's ichnotaxa, and the *Sauroidichnites-Palamopus* issue should be resolved, with *Palamopus* conserved in the interests of ichnotaxonomic stability.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the ichnogenetic name *Sauroidichnites* E. Hitchcock, 1837 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Palamopus* E. Hitchcock, 1845 (gender: masculine), type ichnospecies by monotypy *Ornithichnites palmatus* E. Hitchcock, 1836;
- (3) to place on the Official List of Specific Names in Zoology the name *palmatus* E. Hitchcock, 1836, as published in the binomen *Ornithichnites palmatus* (specific name of the type ichnospecies of *Palamopus* Hitchcock, 1845);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Sauroidichnites* E. Hitchcock, 1837 (as suppressed in (1) above);
 - (b) *Palamopus* E. Hitchcock, 1848 (a junior homonym of *Palamopus* Hitchcock, 1845).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).